

# Eating, Diet, & Nutrition for **LACTOSE INTOLERANCE**



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الخطوة الأولى لصحة عائلتك  
The First Step to your Family's Health

## What is Lactose?

Lactose is commonly found in dairy products, such as milk, yogurt, cream, butter, ice cream, and cheese. However, lactose can also be found in some bread and baked foods, ready-to-eat breakfast cereals, instant soups, confectionery, biscuits, salad dressings, sausages, gravy, drink mixes, and margarine: the so-called “hidden lactose”. Additionally, lactose can also be hidden in prescription and over-the-counter medications .



## What is Lactose intolerance?

Lactose intolerance (LI) occurs when the small intestine does not produce enough of the lactase enzyme to digest lactose, the sugar found in milk. The treatment for LI consists mainly of reducing or eliminating lactose from the diet until the symptoms disappear. Therefore, the dietetic approach has a crucial role in the management of LI patients.

## What are The signs and symptoms of lactose intolerance?

The signs and symptoms of lactose intolerance usually begin from 30 minutes to two hours after eating or drinking foods that contain lactose.

### Common signs and symptoms include:

- Diarrhea
- Nausea, and sometimes, vomiting
- Stomach cramps
- Bloating
- Gas

## What is the treatment?

**LACTOSE-FREE DIET** is a key treatment for patients diagnosed with LI, it is essential for affected individuals to stay away from selected dairy products and non-dairy foods that contain milk and/or lactose ingredients. Therefore, it is important to pay careful attention to the ingredients lists of products being consumed. Words that indicate the presence of lactose include curds, whey, milk, milk by-products, dry milk solids, and milk powder.



### PEOPLE WITH LACTOSE INTOLERANCE CAN HANDLE DIFFERENT AMOUNTS OF LACTOSE.

Research suggests that many people could have 12 grams of lactose—the amount in about 1 cup of milk—without symptoms or with only mild symptoms.

### You may be able to tolerate milk and milk products if you

- Drink small amounts of milk at a time and have it with meals
- Add milk and milk products to your diet a little at a time and see how you feel
- Try eating yogurt and hard cheeses, like cheddar or Swiss, which are lower in lactose than other milk products
- Use lactase products to help digest the lactose in milk and milk products



## what is the major risk associated with the complete elimination of dairy products from the diet?

### **CALCIUM DEFICIENCY:**

It is fundamental to ensure adequate calcium intake at each stage of life to build and maintain a healthy skeleton, especially in those with LI, who consume less dietary calcium than non-LI individuals. The best sources of dietary calcium include milk, cheese and dairy products, such as broccoli, collards, kale, turnip greens, and fortified soy products. Other foods with less calcium bioavailability are fortified soymilk, sesame seeds, almonds, and red and white beans. Despite this, calcium bioavailability from plant foods can be affected by oxalates and phytates, which are inhibitors of calcium absorption.

According to the National Medical Association, calcium requirements are the same for males and females during the first 50 years of life (1-3 years: 700 mg Ca/day; 4-8 years and 19-50 years: 1000 mg Ca/day), with the highest recommended intake during the adolescence, when maximal bone growth occurs (9-18 years: 1300 mg Ca/day).

**In addition to calcium, vitamin D, vitamin A, potassium, zinc, and magnesium in dairy products are also important nutrients in bone formation.**



### **VITAMIN D DEFICIENCY:**

Vitamin D helps your body absorb and use calcium. Be sure to eat foods that contain vitamin D, such as eggs and certain kinds of fish, such as salmon. Some ready-to-eat cereals and orange juice have added vitamin D. Some milk and milk products also have added vitamin D. If you can drink small amounts of milk or milk products without symptoms, choose products that have added vitamin D. Also, being outside in the sunlight helps your body make vitamin D.

## What foods and drinks contain lactose?

Lactose is in all milk and milk products and may be found in other foods and drinks.

Milk and milk products may be added to boxed, canned, frozen, packaged, and prepared foods. If you have symptoms after consuming a small amount of lactose, you should be aware of the many products that may contain lactose, **such as**

- Bread and other baked goods, such as pancakes, biscuits, cookies, and cakes
- Processed foods, including breakfast cereals, instant potatoes, soups, margarine, salad dressings, and flavored chips and other snack foods
- Processed meats, such as bacon, sausage, hot dogs, and lunch meats



- Milk-based meal replacement liquids and powders, smoothies, and protein powders and bars
- Nondairy liquid and powdered coffee creamers, and non-dairy whipped toppings

You can check the ingredient list on packaged foods to see if the product contains lactose. The following words mean that the product contains lactose:

- Milk
- Lactose
- Whey
- Curds
- Milk by-products
- Dry milk solids
- Nonfat dry milk powder
- A small amount of lactose may be found in some prescription and over-the-counter medicines. Talk with your doctor about the amount of lactose in medicines you take, especially if you typically cannot tolerate even small amounts of lactose.

## Lactose amount in certain food:

FOOD	LACTOSE CONTENT (G) PER 100 G
WHOLE MILK	4.9
SKIMMED MILK	5.3
LACTOSE-FREE MILK	0.01-0.1
GOAT MILK	4.7
COOKING CREAM	3.9
SOUR CREAM	3.4
POWDERED MILK	4.2
BUTTER	1.1
PLAIN YOGURT	2.6
FRUIT YOGURT	3.2
GREEK YOGURT	0.5
CULTURED FERMENTED MILK	3.75
CULTURED BUTTERMILK	4.5
MOZZARELLA CHEESE	0.7
BUFFALO MOZZARELLA	0.4
RICOTTA CHEESE	3.5
FETA CHEESE	1.4
COTTAGE CHEESE	3.2
LACTOSE-FREE FRESH CHEESES	0.01-0.1
CHEDDAR	0.5



**THESE ARE ESTIMATES ONLY**  
Actual lactose content may vary by specific product, brand, or recipe

## REFERENCES

1. Dalal SR, Chang EB. Chapter 65: Disorders of epithelial transport, metabolism, and digestion in the small intestine. In: Podolsky DK, Camilleri M, Fitz JG, Kalloo AN, Shanahan F, Wang TC, eds. *Yamada's Textbook of Gastroenterology*. 6th ed. West Sussex: John Wiley & Sons; 2016;1276-1293.
2. U.S. Department of Agriculture, Agricultural Research Service. USDA national nutrient database for standard reference, release 28. Released September 2015, slightly revised May 2016. USDA Food Composition Databases website. <https://ndb.nal.usda.gov/ndb/>
3. Lactose intolerance—symptoms and causes—Mayo Clinic. <https://www.mayoclinic.org/diseases-conditions/lactose-intolerance/symptoms-causes/syc-20374232>
4. Dietary reference values for nutrients summary report. EFSA Support Publ; 2017.
5. Lactose intolerance—treatment—NHS. <https://www.nhs.uk/conditions/lactose-intolerance/treatment/>. Accessed 27 Apr 2020.
6. Guide: nutritional characteristics—Parmigiano Reggiano. <https://www.parmigianoreggiano.com/product-guide-nutritional-characteristics/#2>. Accessed 27 Apr 2020, 06 Apr 2020.

